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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,695	02/27/2004	Justin F. Chapweske	1060-001US01	6997
28863 7590 01/02/2008 SHUMAKER & SIEFFERT, P. A. 1625 RADIO DRIVE SUITE 300 WOODBURY, MN 55125			EXAMINER OSMAN, RAMY M	
			ART UNIT 2157	PAPER NUMBER
			NOTIFICATION DATE 01/02/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@ssiplaw.com

Office Action Summary	Application No. 10/788,695	Applicant(s) CHAPWESKE, JUSTIN F.	
	Examiner Ramy M. Osman	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. This action is responsive to application filed on February 27, 2004. Claims 1-18 are pending examination.

Drawings

2. The drawings filed on 2/27/2004 are acknowledged and are acceptable.

Claim Objections

3. Claim 4 objected to because of the following informalities: The claim states "maintaining the prioritization the order..." which does not seem to be grammatically correct. The placement the words "the" make the sentence awkward and unclear.
4. Claim 7 is objected to: Change "determines" to "determine".
5. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
7. Claim 14 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Regarding claim 14, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-13,15-18 rejected under 35 U.S.C. 102(b) as being anticipated by Young (US Patent No 6,477,522).

11. In reference to claim 1, Young teaches a parallel download system executing on a client computer to control download of data from a plurality of source servers in parallel, the system comprising:

a source scheduler to generate a download schedule to control which source servers will be downloaded from at a current point in time (column 4 lines 30-37);

a prioritization scheduler that tracks the latency and throughput of all channels to the source servers and dynamically adjusts the download schedule to control download performance (column 4 line 36); and

an I/O dispatcher to produce an output stream to present the downloaded data to one or more external applications or a user (column 3 lines 22-32, presentation to a user is inherent).

12. In reference to claim 2, Young teaches the parallel download system of claim 1, wherein the source scheduler keeps track of information about each source server and uses that information to decide which source servers to download from (column 4 lines 30-38).

13. In reference to claim 3, Young teaches the parallel download system of claim 1, further comprising a data prioritizer that determines the priority of the data to be scheduled, wherein the data prioritizer specifies an ordering of the data from a highest priority data to a lowest priority data (column 4 lines 36-38).

14. In reference to claim 4, Young teaches the parallel download system of claim 3, wherein the prioritization scheduler adjusts the download schedule while maintaining the prioritization the order in which that data will be received (column 4 lines 39-54).

15. In reference to claim 5, Young teaches the parallel download system of claim 1, further comprising one or more channel adapters to translate encoded information from a first format used to transfer the information across a channel to a second format desired for a download (column 3 lines 50-60).

16. In reference to claim 6, Young teaches the parallel download system of claim 1, further comprising a control interface that allows external applications or users to control the behavior of the parallel download system (column 4 lines 21-24).

17. In reference to claim 7, Young teaches the parallel download system of claim 1, further comprising a proportional allocator to determines a proportion of the data that will be transferred from a channel that is currently being scheduled (column 4 lines 39-54).

18. In reference to claim 8, Young teaches the parallel download system of claim 1, further comprising a bulk scheduler to determines which bytes of the data will be scheduled (column 4 lines 39-57).

19. In reference to claim 9, Young teaches the parallel download system of claim 1, further comprising an advanced scheduler that integrates with the proportional allocator to allow data to be allocated during a different time interval than a current time interval (column 4 lines 58-67).

20. In reference to claim 10, Young teaches the parallel download system of claim 9, wherein the advanced scheduler features a sub-interval smoothing component that reduces the burstiness of the availability of high priority data with the proportional allocator (column 4 line 58 – column 5 line 9).

21. In reference to claim 11, Young teaches the parallel download system of claim 1, further comprising a constraint scheduler to ensure that the source scheduler does not attempt to retrieve data that a source server cannot provide (column 4 line 58 – column 5 line 9).

22. In reference to claim 12, Young teaches the parallel download system of claim 1, further comprising one or more channel receivers to read the data from a respective channel and writes it to an I/O dispatcher (column 3 lines 55-65).

23. In reference to claim 13, Young teaches the parallel download system of claim 1, further comprising an integrity verification engine to determine that the desired data is received intact and that none of the channels were providing data that is either corrupt or a different version of the content that is desired (column 4 line 58 – column 5 line 9).

24. In reference to claim 15, Young teaches the parallel download system of claim 13, further comprising a corruption repair engine to repair data corruption detected by the integrity verification engine (column 5 lines 1-9).

25. In reference to claim 16, Young teaches the parallel download system of claim 1, further comprising one or more channel connector to establish a new channel to the scheduled source server (column 4 lines 54-67).

26. In reference to claim 17, Young teaches the parallel download system of claim 1, wherein the source scheduler ranks the source servers according to one or more of: external ranking input received from a user or an administrator or an external ranking service; a throughput associated with each source server; a latency associated with each source server; a number of network hops to the source server from the parallel download system; a geographical location of each source server relative to the parallel download system; and a channel cost associated with the channel from the parallel download system to each source server (column 4 line 58 – column 5 line 9).

27. In reference to claim 18, Young teaches the parallel download system of claim 3, wherein the prioritization scheduler schedules ranges of bytes to be downloaded (column 5 lines 21-25).

Claim Rejections - 35 USC § 103

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. Claim 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Young (US Patent No 6,477,522) in view of Merkle (US Patent No 4,881,264).

In reference to claim 14, Young teaches the parallel download system of claim 13. Young fails to explicitly teach wherein the integrity verification engine utilizes an iterative hash construct, such as a Merkle Hash Tree. However, Merkle teaches iterative hash constructs within one way hash functions that are used in digital signatures for message verification (Merkle, column 14 lines 30-43). This way it is possible to verify that it was the sender who really sent the message and that the message is in fact the message sent from the sender (Merkle, column 1 lines 11-20).

It would have been obvious for one of ordinary skill in the art to modify Young including an integrity verification engine that utilizes an iterative hash construct as per the teachings of Merkle, so that digital signature can be used to verify that it was the sender who really sent the message and that the message is in fact the message sent from the sender.

Conclusion

30. The above rejections are based upon the broadest reasonable interpretation of the claims. Applicant is advised that the specified citations of the relied upon prior art, in the above rejections, are only representative of the teachings of the prior art, and that any other supportive sections within the entirety of the reference (including any figures, incorporation by references, claims and/or priority documents) is implied as being applied to teach the scope of the claims.

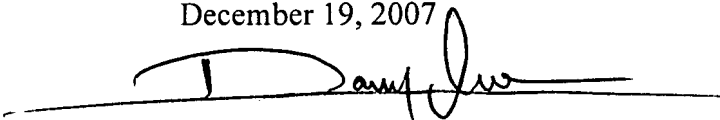
31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See attached Form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramy M. Osman whose telephone number is (571) 272-4008. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RMO
December 19, 2007

A handwritten signature in black ink, appearing to read 'Ramy M. Osman', is written over a horizontal line.